

**AMENDMENTS TO THE ABSTRACT**

Please replace the Abstract with the following:

**ABSTRACT OF THE DISCLOSURE**

To provide a CO<sub>2</sub> incubator capable of accurately controlling the CO<sub>2</sub> gas concentration in an incubation space and quickly coping with a sudden change of CO<sub>2</sub> gas concentrations in the incubation space.

A CO<sub>2</sub> gas sensor [[6]] for detecting the CO<sub>2</sub> concentration in an incubation space [[s]], a control panel for setting a CO<sub>2</sub> gas concentration, a CO<sub>2</sub> gas cylinder [[10]] and electromagnetic switching valve [[9]] for supplying CO<sub>2</sub> gas into the incubation space [[s]], and a CO<sub>2</sub> gas concentration controller [[11]] for controlling the electromagnetic switching valve [[9]] are used in which the controller [[11]] executes operations of proportion, proportion and integration, or proportion, integration, and differentiation in accordance with a deviation between the CO<sub>2</sub> gas concentration in the incubation space s and a CO<sub>2</sub> gas concentration set value, calculates the CO<sub>2</sub> gas supply time and the stop time for unit time to the incubation space [[s,]] and supplies CO<sub>2</sub> gas to the incubation space [[s]] from the CO<sub>2</sub> gas cylinder [[10]] in accordance with the calculated supply time and stop time.